



State of Washington REPORT OF EXAMINATION FOR WATER RIGHT CHANGE

Added or Changed Purpose of Use
Added or Changed Point of Withdrawal/Diversion
Exempt Wells Consolidated

PRIORITY DATE
October 28, 1968

WATER RIGHT NUMBER
CG2-GWC6923

MAILING ADDRESS
WASHINGTON WATER SERVICE
PO BOX 336
GIG HARBOR WA 98335

SITE ADDRESS (IF DIFFERENT)

Total Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
140	GPM	136.6

Total withdrawals or diversions from all sources must not exceed the total quantity authorized for withdrawal or diversion listed above.

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Municipal	140	0	GPM	136.6	0	01/01 - 12/31

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID
0	0	54740

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
PIERCE	GROUNDWATER	N/A	15-KITSAP
PIERCE	GROUNDWATER	N/A	15-KITSAP

SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Well S11 (Horseshoe Lake)	4638001261	AAE010	22N	01E	15	SWSE	47.392156	-122.66315
S01 (Country Time Store well)	0122157009	ACV 534	22N	01E	15	SESW	47.389992	-122.666403

Datum: NAD83/WGS84

Place of Use (See Attached Map)**LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE**

The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

Proposed Works

Well S11: 8 inches in diameter and 260 feet deep, screened in the Sea Level Aquifer
 Well S01: 6 inches in diameter and 214 feet deep, screened in the Sea Level Aquifer

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Started	Completed	December 1, 2021

Measurement of Water Use

How often must water use be measured?	Monthly
How often must water use data be reported to Ecology?	Annually (Jan 31)
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Withdrawal (gpm)

Provisions**Wells, Well Logs and Well Construction Standards**

All wells constructed in the state must meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard must be decommissioned.

All wells must be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag must remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.

Measurements, Monitoring, Metering and Reporting

An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account,

contact the Southwest Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Southwest Regional Office for forms to submit your water use data.

Department of Health Requirements

Prior to any new construction or alterations of a public water supply system, the State Board of Health rules require public water supply owners to obtain written approval from the Office of Drinking Water of the Washington State Department of Health. Please contact the Office of Drinking Water at Southwest Drinking Water Operations, 243 Israel Road S.E., PO Box 47823, Tumwater, WA 98504-7823, (360) 236-3030.

Water Use Efficiency

The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, will have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Findings of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. CG2-GWC6923, subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

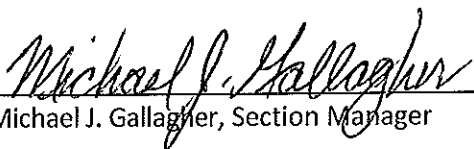
To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW Ste 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Signed at Olympia, Washington, this 26th day of February 2015.


Michael J. Gallagher, Section Manager

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.

INVESTIGATOR'S REPORT

Tammy Hall, Department of Ecology

Water Right Control Number CG2-GWC6923

WASHINGTON WATER SERVICE

BACKGROUND

On March 6, 2013 Michael Ireland, representing Washington Water Service (WWS) filed *Application for Change of Water Right* CG2-GWC 6923 to consolidate water rights perfected under the groundwater exemption and add a point of withdrawal to GWC 6923. This project is in the Kitsap Water Resource Inventory Area (15).

GWC 6923 authorized withdrawals of 110 gallons per minute (gpm) and 134 acre-feet (ac-ft) per year for community domestic supply. The attributes of GWC 6923 and the proposed changes are summarized below in Table 1.

Table 1. Attributes of the Existing Water Right and Proposed Change

	<i>Existing</i>	<i>Proposed</i>
Name	H.E. Anderson and Jack G. Batt	Washington Water Service
Priority Date	7/20/1970	
Change Application Date		3/6/2013
Instantaneous Rate (gallons per minute, gpm)	110	140
Annual Quantity (acre-ft per year, ac-ft/yr)	134	136.6
Purpose(s) of Use	Community Domestic Supply	Municipal supply
Period of Use	Year-round	Same
Place(s) of Use	The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right	Same

Table 2. Proposed Sources of Withdrawal

Source Name	Parcel	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Well S11 (Horseshoe Lake)	4638001261	22N	01E	15	SW SE	47.392156	-122.66315
Well S01 (Country Time Store Well)	0122157009	22N	01E	15	SE SW	47.389992	-122.666403

Table 3. Existing Source of Withdrawal

Source Name	Parcel	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Well S11 (Horseshoe Lake)	4638001261	22N	01E	15	SW SE	47.392156	-122.66315

Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed change.

Public Notice

RCW 90.03.280 requires notice of a water right application be published once a week for two consecutive weeks in a newspaper of general circulation in the county where the water is withdrawn. An original public notice for this project proposal was posted in *The News Tribune*, published in Pierce County, beginning September 24 and ending October 2, 2014. The Department of Ecology did not receive any protests or letters of concern in response to this notice.

State Environmental Policy Act (SEPA)

A SEPA determination evaluates if a proposed withdrawal will cause significant adverse environmental impacts. A SEPA threshold determination is required for:

- 1) Surface water applications for more than 1 cubic feet per second (cfs). For agricultural irrigation, the threshold increases to 50 cfs, if the project isn't receiving public subsidies.
- 2) Groundwater applications requesting more than 2,250 gpm.
- 3) Projects with several water right applications where the combined withdrawals meet the conditions listed above.
- 4) Projects subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).
- 5) Applications that are part of several exempt actions that collectively trigger SEPA under WAC 197-11-305.

This application does not meet any of these conditions and is categorically exempt from SEPA.

Water Resources Statutes and Case Law

RCW 90.03.380(1) states a water right put to beneficial use may be changed. The point of diversion, place of use, and purpose of use can be changed, as long as other water rights will not be harmed or injured.

When changing or adding points of withdrawal to groundwater rights (RCW 90.44.100), or when consolidating exempt wells with an existing permit or certificate (RCW 90.44.105), the wells must draw

from the *same body of public groundwater*. Indicators that wells tap the *same body of public groundwater* include:

- (a) Hydraulic connectivity.
- (b) Common recharge (catchment) area.
- (c) Common flow regime.
- (d) Geologic materials that allow for storage and flow, with recognizable boundaries or effective barriers to flow.

RCW 90.44.100 allows Ecology to amend a ground water certificate to allow the user to add an additional well at a new location, if:

- (a) The additional well taps the same body of public ground water as the original well. RCW 90.44.100(2)(a),
- (b) Where an additional well is constructed, the user may continue to use the original well, but the combined total withdrawal from all wells shall not enlarge the right conveyed by the original permit or certificate. RCW 90.44.100(2)(c),
- (c) Other existing rights shall not be impaired. RCW 90.44.100(2)(d).

RCW 90.03.570(1) and (2) state, that if specific conditions are fulfilled, a municipal water supplier is eligible for a change of water right as provided by RCW 90.03.380. This is true even if the right was not put to full beneficial use.

INVESTIGATION

The material reviewed in support of this application included the following:

- The State Ground Water Codes, administrative rules, and policies.
- Department of Ecology's Water Right Tracking System (WRTS) database.
- Topographic and local area maps.
- Notes from a site visit on November 10, 2014.
- Hydrogeology memo written by Tammy Hall, licensed hydrogeologist, with Water Resources Southwest Regional Office, dated December 2, 2014.

Project Location and Site Description

The project is situated in the northern part of the Key Peninsula along the Kitsap-Pierce County boundary, in Water Resource Inventory Area (WRIA) 15. The Horseshoe Lake Well is part of WWS's Minterbrook Water System (ID# 54740).

See Attachment #1

The Minterbrook system serves properties in northwestern Pierce and in south central Kitsap counties in a portion of T 22 N, R 2 EWM. The system is roughly 5 ½ miles northwest of Gig Harbor along the north side of Carr Inlet of Puget Sound.

Proposed Change

The intent of this application is to both consolidate uses perfected under the groundwater permit exemption (RCW 90.44.050) and add a point of withdrawal to GWC 6925. Both wells are in the service area for the Minterbrook Water System (DOH ID#54740B) and owned by WWS. Wells S011 and S01 are roughly 1,200 feet apart.

History of Water Use

Country Time Store Well-Group B System

Country Time Store Group B system served the store and six lots. This Group B system is inter-tied with WWS's Minterbrook Water System but the well is not connected. The intent is to re-connect the well once this *Application for Change* has been approved.

The well was pumped at roughly 30 gpm. Annual production over the most-recent 5 year period shows the highest use occurred in 2009 where annual production was 2.6 ac-ft. This is the amount eligible for consolidation to GWC6923.

Existing Water Use under GWC6923

Metering data for the Horseshoe Lake well in 2012 and 2013 shows the well produced roughly 33 ac-ft each year, far below the annual quantity GWC 6923 authorizes (134 ac-ft). Although a large portion of GWC 6923 is inchoate, this right is for municipal supply purposes and all existing quantities remain in good standing. This right is eligible for consolidation of exempt rights.

Other Rights Appurtenant to the Place of Use

Minterbrook Water System operates 17 wells under 18 permits and certificates. These water rights authorize an annual total of 887.6 acre-ft; however, current use is roughly half at 448.8 ac-ft. WWS's water right portfolio for the Minterbrook System is summarized in Attachment #2.

See Attachment #2

Hydrologic/Hydrogeologic Evaluation

The Minterbrook Water System is situated on the northern portion of the Key Peninsula, at the southern end of the Puget Lowland, in WRIA 15 (Kitsap Basin).

The land surface in Minterbrook's service area consists of rolling upland terrain where elevations range from 60 to 320 feet above mean sea level (msl). The upland portion has moderately to steep slopes, the steeper areas being in the ravines. Along Puget Sound, the land surface terminates in steep bluffs.

The subsurface in the area consists of unconsolidated and semi-consolidated glacial sediments. These deposits are between 1,200 to 2,000 feet thick (Jones, 1996).

Garling (1965) describes a typical glacial sequence of glacial deposits as consisting of the following units, listed from youngest (top) to oldest (bottom):

- Recessional outwash. In the project area, recessional outwash consists of a discontinuous mantle of sand and gravel that overlies the till. It is often found on hilltops.
- Till. Glacial till is a compact and unsorted mixture of cobbles and pebbles in a binder of sandy silt and clay. Vashon till is typically gray to bluish-gray.
- Advance outwash. This type of glacial deposit is left at the front of an advancing glacier and primarily consists of gravels and coarse sands. Advance outwash is capped by till.

Groundwater is produced from three aquifers. All three aquifers are confined where fully saturated and overlain by a low permeable unit. Shallow, perched groundwater zones exist in several locations on the peninsula where lenses of sand and gravel occur within lower permeable material. Water levels in the perched groundwater zones are slightly higher than those in the Upper Aquifer (EMCON 1992).

- Upper Aquifer. The Upper Aquifer is continuous across much of the Key Peninsula, with the exception of the deeply incised areas. Water table conditions exist in much of the Upper Aquifer and it generally mimicking ground surface.
- Sea Level Aquifer. The Sea Level Aquifer is characterized by a low elevation potentiometric surface up to 135 feet above mean sea level ((msl).
- Deep Aquifer. Borehole information for the two permeable units comprising the Deep Aquifer is very limited, and the lateral extents of the Deep Aquifer are not known. Water level data for this aquifer is sparse, but several water level measurements indicate that the potentiometric surface is generally less than 100 feet above msl.

Groundwater recharge is by direct precipitation. Between 13% (Drost 1982) and 17% (Golder 2003a) of precipitation is available for groundwater recharge after contribution to baseflow is made.

Groundwater flow within aquifers is primarily horizontal, from areas of higher head to areas of lower head. Drost (1982) also cites a downward flow component where groundwater flows toward marine water bodies and surface drainages.

Site Conditions

Both S11 and S01 are situated in the watershed for an unnamed tributary of Minter Creek, roughly two miles upstream of its confluence with the mainstem of Minter Creek. Both wells are on the northwest facing slope of a ridge that separates the unnamed tributary from Burley Lagoon and Henderson Bay roughly 1,200 feet apart.

See Attachment #3

S11 (Horseshoe Lake Well) is accessed off 94th Avenue NW. The wellhead is roughly 25 feet above the stream and less than 500 feet away.

S01 is accessed off 97th Ave Ct NW, situated near the top of the ridge about 80 feet above the creek about 1,000 feet away.

Both wells are completed in the same aquifer, the Sea Level Aquifer, and the same body of public groundwater.

Table 4. Details of S11 (Horseshoe Lake well) and S01 (Country Time Store well).

	Well S11 (Horseshoe Lake well)	S01 (Country Time Store well)
Well Tag	AAE010	ACV534
Date Completed	January 17, 1969	April 4, 1975
Well head elevation (ft above mean sea level, msl)	227	288
Well diameter (inches, in)	8	6
Completed depth		
ft below ground surface (bgs)	260	214
elevation, ft above or below msl	33 ft below msl	74 ft above msl
Screened interval		
ft bgs	251-260	193-198
elevation,	24-33 ft below msl	95-90 ft above msl
Static water level (ft bgs)	165.90	150.40
Date measured	04/2014	12/2012
Pumping capacity (gpm)	110	30

Impairment Considerations

Impacts to existing water users and surface water

WAC 173-150-060 specifies that only impacts to “qualifying withdrawal facilities” fit the legal definition of impairment. This definition means wells can be affected as long they are not impaired. Qualifying withdrawal facilities are wells completed in the same aquifer as the new point of withdrawal. The well must span the aquifer’s entire saturated thickness and the pump elevation must allow variation in seasonal water levels.

Approval of this application should not result in any new impacts to surface water or area water users because the wells are less than 1,200 feet apart and draw water from the same aquifer.

Public Interest Considerations

Approving the proposed change is not contrary to the public interest.

Consideration of Protests and Comments

No protests were filed against this application.

Conclusions

In accordance with Chapter 90.03 RCW, I conclude that:

- The water is physically and legally available for appropriation,
- The water will serve a beneficial use,
- The change as approved will not cause impairment of existing rights, and
- The proposed use is not detrimental to the public interest.

Selected References

Drost, B.W., 1982. Water Resources of the Gig Harbor Peninsula and Adjacent Areas, Washington, USGS Open File Report 81-1021.

EMCON, Inc. 1992. Gig Harbor Peninsula Ground Water Management Plan, Task 5 Hydrogeologic Evaluation Report. Portland, Oregon. Prepared for the Tacoma-Pierce County Health Department.

Garling, M.E., and Dee Molenaar, et al. 1965. Water Resources and Geology of the Kitsap Peninsula and Certain Adjacent Islands, USGS Water Supply Bulletin No. 18.

Golder Associates, 2003. Report on Groundwater Rights Evaluation Application G2-28952 (Shaw's Cove Well #2) Redmond, Washington.

Golder Associates, 2003a. Kitsap Watershed Planning (WRIA 15) Instream Flow Assessment Step B Draft Report. Redmond, Washington.

Golder Associates, 2003b. Kitsap Watershed Planning (WRIA 15) Water Quality Technical Assessment. Redmond, Washington.

Jones, M.A. 1996. Thickness of Unconsolidated Deposits in the Puget Sound Lowland, Washington and British Columbia, a Contribution of the Regional Aquifer-System Analysis Program. US Geological Survey.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved in the amounts and within the limits listed below and subject to the provisions listed above

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

- 140 gpm
- 136.6 acre-feet per year
- Municipal supply

Points of Withdrawal:

- Well S11: SW $\frac{1}{4}$ SE $\frac{1}{4}$
- Well S01: SE $\frac{1}{4}$ SW $\frac{1}{4}$,
Both in Section 15, Township 22 North, Range 1 E .W.M.

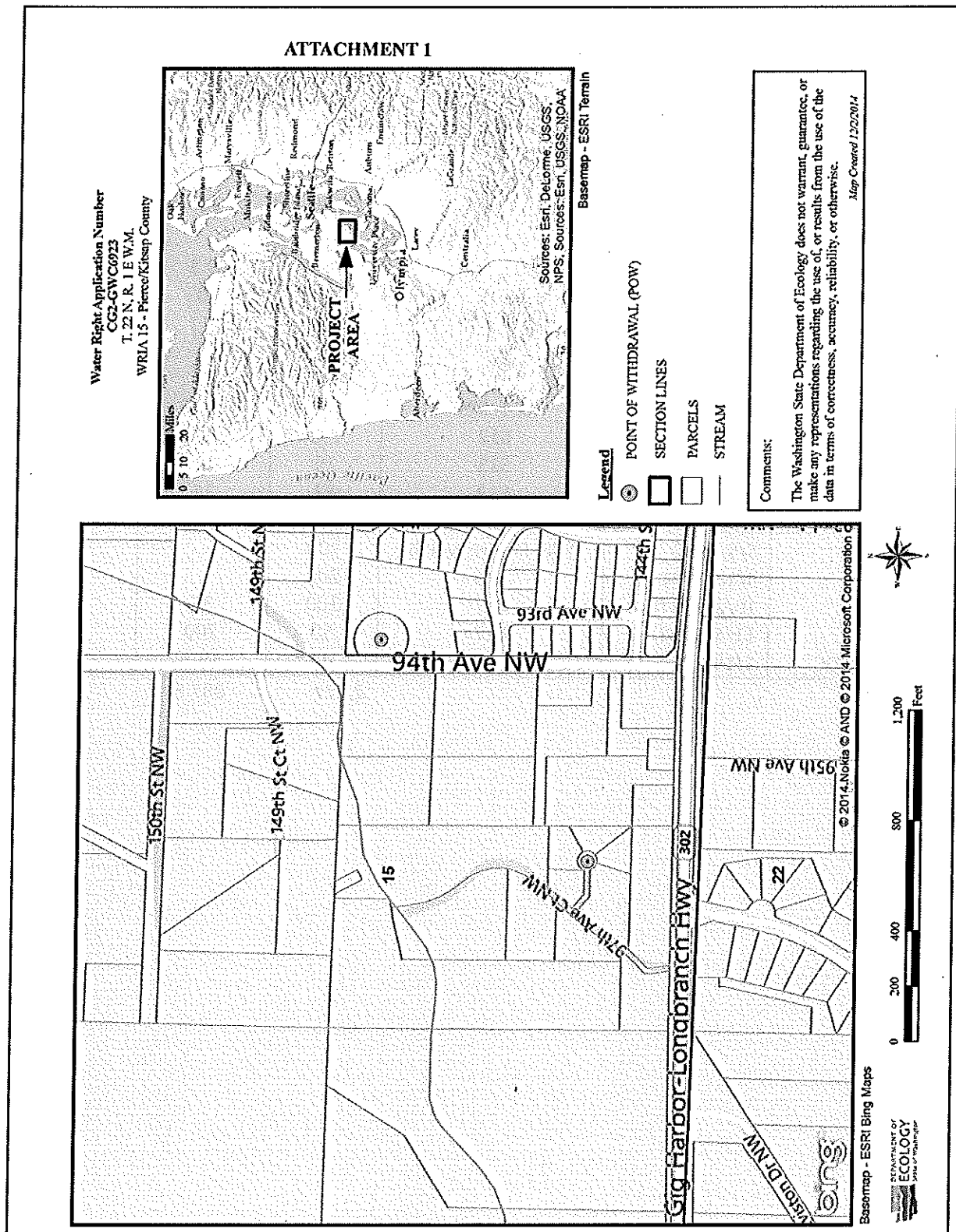
Place of Use

- As described on Page 1 of this Report of Examination.


Tammy Hall

2/25/2015
Date

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



Attachment #2: Minterbrook Water System Existing Water Rights

Water Right # C-Certificate P-Permit	Priority Date	Source Name	Quantity		
			Qi GPM	Additive	Non Additive
G2-21729C	12/18/1973	S01	66		45
G2-21730C	12/18/1973	S02	60	45	
G2-28057P	3/5/1991	S15, S01, S02	500		200
G2-22103C	3/26/1974	S03, S04	65	89.3	
G2-21985C	3/4/1974	S05	250	50	
G2-25902C	4/27/1981	S06, S07	60		48
G2-23801C	4/15/1975	S09	50	44	
G2-26762C	8/2/1985	S10	75	80	
G2-GWC6925 ¹	10/28/1968	S11, S01	140	136.6	
G2-21562C	10/19/1973	S12	100	80	
G2-00428C	3/17/1969	S13	25	14	
G2-21560C	10/19/1973	S13	42	34	
G2-28055P	3/5/1991	Future well B	250	64.2	60.8
G2-28491P	5/5/1992	S08, Future well B	200		108
G2-28078P	3/18/1991	S16	200		215
G2-24324C	10/20/1976	S17	100	35	
G2-29152P	11/4/1994	S17	50	200	
G2-GWC06660C	4/15/1966	S03	44	15.5	
Total			2,277	887.6	

¹ Quantities reflect amounts approved in this proposed consolidation/change.

